DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-008797

Address: 333 Burma Road **Date Inspected:** 28-Aug-2009

City: Oakland, CA 94607

OSM Arrival Time: 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component:** OBG Trail Assembly

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) S. Manjunath. Math was present during the times noted above for observations relative to the work being performed.

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 3AW

This Quality Assurance (QA) Inspector witnessed final tension verification for Lower Chevron Splice Plates. Inspected 10% on a random basis and found the tension to be in general compliance. Witnessed bolts tension verification at PP 19 Counter Weight side. Bolt sizes used were M22 x 75 RC Set# DHGM220005 (Lower Chevron East and West Side) and final Torque required was 473 N-m. Manual Torque wrench is been used with Sr. No. XQ2 - 584.

Segment 1BW

This Quality Assurance (QA) Inspector witnessed final tension verification for Lower Chevron Splice Plates. Inspected 10% on a random basis and found the tension to be in general compliance. Witnessed bolts tension verification at PP 11 Cross Beam side. Bolt sizes used were M22 x 75 RC Set# DHGM220005 (Lower Chevron West Side) and final Torque required was 473 N-m for the same Bolt connecting Angle to the Floor Beam Flange to the Splice Plate Bolt sizes used were M22 x 65 RC Set# DHGM220021 (Lower Chevron West Side) and Rotation of Nut being performed for 180degree. Manual Torque wrench is been used with Sr. No. XQ2 - 584.

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2AE

This Quality Assurance (QA) Inspector prepared an Incident Report no.

04-0120F4_TL-15_B278_08-28-09_Suspender Bracket_Bike Path Side_2AE_PP_16.doc Dated 08.28.2009 for Final Tightening the bolts without following the two stage i.e., Preliminary Stage (Snug Tightening) and Final Tightening (Rotating 180 degree apart from the match marking after Snug Tightening) for Suspender Bracket No. SB 16E for Segment 2AE Bike Path Side. The bolt final Tension required is 853 N-m and bolts were directly been tensioned to 1000 N-m.

Lift 4 West

This Quality Assurance (QA) Inspector witnessed final tension verification for Lower Chevron Splice Plates. Inspected 10% on a random basis and found the tension to be in general compliance. Witnessed bolts tension verification at

At Segment 4AW at PP 24 (East Side) Lower Chevron Brace and Bolt Size used was M22 x 70 RC Set# DHGM220020 and final Torque required was 520 N-m and Green Tag No. 288.

At Segment 3AW at PP 22 N (East Side);22 S(West) Lower Chevron Brace and Bolt Size used was M22 x 75 RC Set# DHGM220005 and final Torque required was 473 N-m and Green Tag No. 289.

At Segment 4AW ,4BW PP 24 N (W) ;25 N(E);26N(W);28N(E) Lower Chevron Brace and Bolt Size used was M22 x 75 RC Set# DHGM220005 and final Torque required was 473 N-m and Green Tag No.290.

At Segment 4BW at PP 26,27,28 CB3 Web plate to Bottom plate and Bolt Size used was M24 x 60 RC Set# DHGM240014 and final Torque required was 567 N-m and Green Tag No. 283.

At Segment 4BW at PP 26,27,28 CB3 Web plate to Bottom plate and Bolt Size used was M24 x 65 RC Set# DHGM240009 and final Torque required was 567 N-m and Green Tag No. 284.

At Segment 4BW at PP 26-28 CB3 Bottom plate to FL3 and Bolt Size used was M24 x 70 RC Set# DHGM240010 and final Torque required was 560 N-m and Green Tag No. 285.

At Segment 3AE at PP 19 N (E); 20 N (E&W) Lower Chevron Brace and Bolt Size used was M22 x 75 RC Set# DHGM240010 and final Torque required was 473 N-m and Green Tag No. 286.

At Segment 3AE at PP 20 North (West Side) Lower Chevron Brace and Bolt Size used was M22 x 70 RC Set# DHGM220004 and final Torque required was 453 N-m and Green Tag No. 287.

At Segment 3AE at PP 20 North (East Side) Lower Chevron Brace and Bolt Size used was M22 x 65 RC Set# DHGM220033 and Rotation of Nut for 1800 and Green Tag No. 291.

At Segment 1AE at PP 8.5 South (East Side) Lower Chevron Brace and Bolt Size used was M22 x 75 RC Set#

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DHGM220005 and Final Torque required was 473 N-m and Green Tag No. 292.

At Segment 1AE at PP 8.5 South (East Side) Lower Chevron Brace and Bolt Size used was M22 x 65 RC Set# DHGM220033 and Rotation of Nut for 1800 and Green Tag No. 293.

At Segment 2AE at PP 14 Suspender Bracket Bike Path Side and Bolt Size used was M24 x 75 RC Set# DHGM240020 and final Torque required was 600 N-m and Green Tag No. 294.

At Segment 2AE at PP 14 Suspender Bracket Bike Path Side and Bolt Size used was M24 x 85 RC Set# DHGM240015 and final Torque required was 517 N-m and Green Tag No. 295.

At Segment 2AE at PP 14 Suspender Bracket Bike Path Side and Bolt Size used was M27 x 85 RC Set# DHGM270001 and final Torque required was 853 N-m and Green Tag No. 296.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

Inspected By:	Math, Manjunath	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer